STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION IV
ID# (last 4 #s)

McDonnell Douglas Astronautics Company

Titusville, Florida

Facility/Unit Type:	**Manufacturing of aeronautical parts**
Contaminants:	**Inorganics**
Media:	**Soil, ground water**
Remedy:	**No further action**

FACILITY DESCRIPTION

The 422.11-acre McDonnell Douglas Astronautics Company (MDAC) site is an aeronautical parts manufacturing facility located at 701 Columbia Boulevard, Titusville, Florida. The facility is composed of eight main buildings and a magazine area in the southwest corner. The U.S. Environmental Protection Agency, Region IV (EPA) issued a five-year Hazardous and Solid Waste Amendment (1984) permit to MDAC on November 30, 1987 to address three solid waste management units (SWMUs).

Solid fuel propellants (EPA hazardous waste number: D003) of various types are generated at the site. Approximately 90 percent of the reactive waste treated is solid propellant of SMAW and Dragoon Missiles. The remaining 10 percent includes miscellaneous unservicable igniters, fuses, Dragon rocket motors, and 9mm spotting rifle cartridges. The solid fuel propellants can be either unconfined or confined. All reactive wastes are treated onsite by burning in open pits on a controlled basis.

The site is divided into three (3) solid waste management units (SWMUs): SWMU-3, composed of two operational ordnance burn pits and a furnace; SWMU-5, the abandoned burn pit; and SWMU-6, which includes several waste piles.

Between 1971 and 1984, McDonnell Douglas operated three burn pits for thermal destruction of ordnance wastes generated on the site. These burn pits have been removed followingthe EPA-approved clean closure plan (1988). In 1984, a new pair of burn pits were built nearby. These burn pits (SWMU-3) are currently operated and monitored under the State permit issued to MDAC on July 30, 1992.

McDonnell Douglas undertook a series of detailed sampling and analysis programs to determine and document potential or actual releases to the environment. As a part of the submittal for these activities, MDAC submitted clean closure plans for SWMU-5 and SWMU-6.

Site closure of the SWMU-5 abandoned burn pits was performed according to an approved closure plan. The closure approval for SWMU-5 was delayed due to the presence of arsenic above the EPA drinking water standard.

EXPOSURE PATHWAYS

There is no potential for exposure via contact with residual contaminated soils. No active water supply wells within 1,000 feet of the facility were identified. Also, there were no known plans to site water supply wells in the area.

There are no known domestic, recreational, agricultural, industrial, or environmental local uses of creek in the area. Human access to the McDonnell Douglas facility is limited by a chain fence and 24-hour guard security. There are no known or documented endangered or threatened species near the facility

SELECTED REMEDY

Condition II.C.I of the permit stipulated that a SWMU can be excluded from the RFI requirements if it can be documented that a release is not probable. Based on analysis of the data summarized below, it is determined that further investigation for the three SWMUs was not required.

After the pits and surrounding soil were removed, in SWMU-5, the facility took a total of seven soil samples from each pit. The data showed that the post-closure samples did not deviate from background samples,

The facility collected and analyzed groundwater samples from ten wells near SWMU-5 and detected an arsenic concentration exceeding the drinking water standard of 0.05 mg/l in wells both upgradient and downgradient from SWMU-5. It was determined that further investigation was warranted even though MDAC reported that arsenic was not a component of material used or handled at the site.

A search of historical land use concluded that the arsenic contamination pre-dated the presnce of the facility and therefore the SWMU. Aerial photographs confirmed that a mature citrus grove where pesticides containing arsenic were used was previously located at this site.

Appropriate State and local agencies have been informed regarding the arsenic contamination in the surficial aquifer linked to past pesticide use.

Since ground water is the primary pathway by which hazardous constituents may enter the environment from the various waste piles located in SWMU-6, five wells (MW-1 through MW-5) were sampled to define background conditions for gorund water. The following conclusions were drawn based on the collected data:

Ground water samples taken at each waste pile did not substantially deviate from background well samples and,therefore, do not indicate that contaminants have been released from SWMU-6. Further investigation is not necessary.

INNOVATIVE TECHNOLOGIES CONSIDERED

No innovative technologies were considered.

PUBLIC PARTICIPATION

As the expiration date of the HSWA permit approached, EPA initiated reissuance procedures. Because the three SWMUs had been investigated and a draft final remedy had been approved during the five years, the permit reissuance also served as the modification for reincorporation of the no further action remedy. A 45-day public notice period was established, but no comments were received. The second HSWA permit was issued on January 15, 1993.

NEXT STEPS

Since the final remedy for the three SWMUs is no further action, there are no planned next steps for this site. However, the HSWA permit is still in effect and if new releases from identified SWMUs or new SWMUs and/or areas of concern (AOCs) are discovered, then further investigation may be necessary.

KEY WORDS
Ground water, soil; no action remedy

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